Contents Volume 65 2000

Volume 65 No. 1 2000

Obituary

Ed Tolbert and his love for science: A journey from sheep ranch continues...
A. Goyal **1–6**

Hypothesis

The kinetics of conformation change as determinant of Rubisco's specificity
J. Schlitter, G.F. Wildner **7–13**

Regular papers

Polarized fluorescence spectroscopy of oriented isolated spinach Photosystem I particles
A. Andreeva, M. Velitchkova **15–28**

Thermoluminescence and fluorescence study of changes in Photosystem II photochemistry in desiccating barley leaves
J. Skotnica, M. Matoušková, J. Nauš, D. Lazár, L. Dvořák **29–40**

Chlorophyll fluorescence transients of Photosystem II membrane particles as a tool for studying photosynthetic oxygen evolution
P. Pospíšil, H. Dau **41–52**

Periplasmic electron carriers and photo-induced electron transfer in the photosynthetic bacterium *Ectothiorhodospira* sp.
A. Buche, R. Picorel, J.-M. Moulis, A. Verméglio **53–62**

Negatively charged residues in the H loop of PsaB subunit in Photosystem I from *Synechocystis* sp. PCC 6803 appear to be responsible for electrostatic repulsions with plastocyanin
J.A. Navarro, M. Hervás, J. Sun, B. De la Cerda, P.R. Chitnis, M.A. De la Rosa **63–68**

Cloning, sequencing and analysis of the *puc*C genes from *Rubrivivax gelatinosus* strain 151 and *Rhodopseudomonas acidophila* strain 10050
A.E. Simmons, S.J. Barrett, C.N. Hunter, R.J.R. Cogdell **69–82**

Circularly polarized chlorophyll luminescence reflects the macro-organization of grana in pea chloroplasts
E.E. Gussakovsky, Y. Shahak, H. van Amerongen, V. Barzda **83–92**

Technical communication

Characterization of carotenes in a combination of a C_{18} HPLC column with isocratic elution and absorption spectra with a photodiode-array detector
S. Takaichi **93–99**

Book review **101–102**

Volume 65 No. 2 2000

Obituary: Gábor Horváth (1944–2000)
G. Garab **103–105**

Regular papers

The inhibited xanthophyll cycle is responsible for the increase in sensitivity to low temperature photoinhibition in rice leaves fed with glutathione
C.-C. Xu, L. Li, T. Kuang **107–114**

Low resistance against novel 2-benzylamino-1,3,5-triazine herbicides in atrazine-resistant *Chenopodium album* plants
H. Kohno, A. Ohki, S. Ohki, K. Koizumi, M.E. Van den Noort, G.C. Rodrigues, J.J.S. Van Rensen, K. Wakabayashi **115–120**

The effect of CO_2 enrichment on leaf photosynthetic rates and instantaneous water use efficiency of *Andropogon gerardii* in the tallgrass prairie
N.R. Adam, C.E. Owensby, J.M. Ham **121–129**

Rapid evolutionary divergence of Photosystem I core subunits PsaA and PsaB in the marine prokaryote *Prochlorococcus*
G.W.M. van der Staay, S.Y. Moon-van der Staay, L. Garczarek, F. Partensky **131–139**

Influence of Ca^{2+} on the thylakoid lumen violaxanthin de-epoxidase activity through Ca^{2+} gating of H^+ flux at the CF_o H^+ channel
R.-S. Pan, R.A. Dilley **141–154**

Cell turgor: A critical factor for the proliferation of cyanobacteria at unfavorable salinity
N.P. Ladas, G.C. Papageorgiou **155–164**

Electric properties of thylakoid membranes from pea mutants with modified carotenoid and chlorophyll–protein complex composition
A. Dobrikova, R.M. Morgan, A.G. Ivanov, E. Apostolova, I. Petkanchin, N.P.A. Huner, S.G. Taneva **165–174**

Nitrogen ligation to the manganese cluster of Photosystem II in the absence of the extrinsic proteins and as a function of pH
W. Gregor, R.D. Britt **175–185**

Leaf senescence-like characteristics contribute to cotton's premature photosynthetic decline
W.T. Pettigrew, J.C. McCarty Jr., K.C. Vaughn **187–195**

Letter to the editor

FT-IR spectroscopic studies of the S state transitions
B.A. Barry **197–198**

Announcement **199**

Volume 65 No. 3 2000

Obituary

Remembering Melvin P. Klein
R.D. Britt, K. Sauer, V.K. Yachandra **201–206**

Identification of Photosystem I components from a glaucocystophyte, *Cyanophora paradoxa*: The PsaD protein has an N-terminal stretch homologous to higher plants
H. Koike, M. Shibata, K. Yasutomi, Y. Kashino, K. Satoh **207–217**

Light-induced quenching of chlorophyll fluorescence at 77 K in leaves, chloroplasts and Photosystem II particles
P. Šiffel, I. Hunalová, K. Roháček **219–229**

Short- and long-term redox regulation of photosynthetic light energy distribution and photosystem stoichiometry by acetate metabolism in the green alga, *Chlamydobotrys stellata*
L. Kovács, W. Wiessner, M. Kis, F. Nagy, D. Mende, S. Demeter **231–247**

Analysis of the role of detergent mixtures on the crystallization of the reaction center of Photosystem II
V. Rukhman, N. Lerner, N. Adir **249–259**

Kinetics of absorbance and anisotropy upon excited state relaxation in the reaction center core complex of a green sulfur bacterium
S. Neerken, Y.-Z. Ma, J. Aschenbrücker, K.A. Schmidt, F.R. Nowak, H.P. Permentier, T.J. Aartsma, T. Gillbro, J. Amesz† **261–268**

Functional characteristics of chlorophyll *d*-predominating photosynthetic apparatus in intact cells of *Acaryochloris marina*
V.A. Boichenko, V.V. Klimov, H. Miyashita, S. Miyachi **269–277**

Book review **279**

Corrigendum **281**

Contents Volume 65 **283–285**

Author index Volume 65 **286**